

Texas City Finances — Data at a Glance

PA 3311 / PS 3315: Analytical Techniques — Fall 2026 · our dataset for the whole course

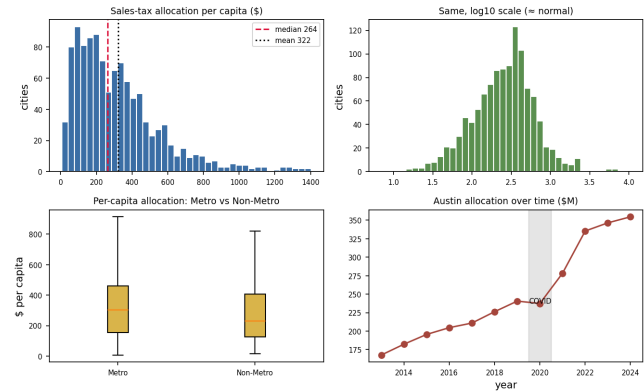
What it is. One row per Texas city per year (**1,180 cities, 2013–2024; 13,930 rows**). Built from Texas Comptroller open data and the U.S. Census of Governments. A companion 2022 cross-section adds **debt** and property taxes.

Key numbers (2024 / panel)

Cities	1,180
Years	2013–2024
Metro vs. Non-Metro	672 / 469
Median sales-tax/capita	\$186
Mean sales-tax/capita	\$277
Median city population	2,104
Largest city (Houston)	2,316,120

Read the skew. Across almost every dollar variable the *mean is far above the median* — a few huge cities pull the average up. That is why we use medians, logs, and care about outliers.

TX City Sales Panel — Data at a Glance (2024 unless noted)



What we do with it, module by module

- **Descriptives & graphs:** distribution of sales-tax per capita — histograms, mean vs. median, outliers.
- **Normal curve & probability:** standardize per-capita sales tax; areas under the curve.
- **Hypothesis testing / CIs:** confidence interval for mean per-capita sales tax.
- **Independent t-test:** Metro vs. Non-Metro cities.
- **Paired t-test:** 2019 vs. 2023 (pre/post-COVID), same cities.
- **Correlation & simple regression:** allocation vs. taxable sales.
- **Multiple regression & OVB:** add taxable sales / population and watch a coefficient move.
- **Final project:** your own question, same data.

Files: TX_City_Sales_Panel_2013_2024.xlsx (panel; Codebook & Summary tabs inside) and TX_City_Finance_2022.xlsx (debt cross-section). Full definitions in CODEBOOK.md. In Excel, get one year with **Data** → **Filter** on **year**.